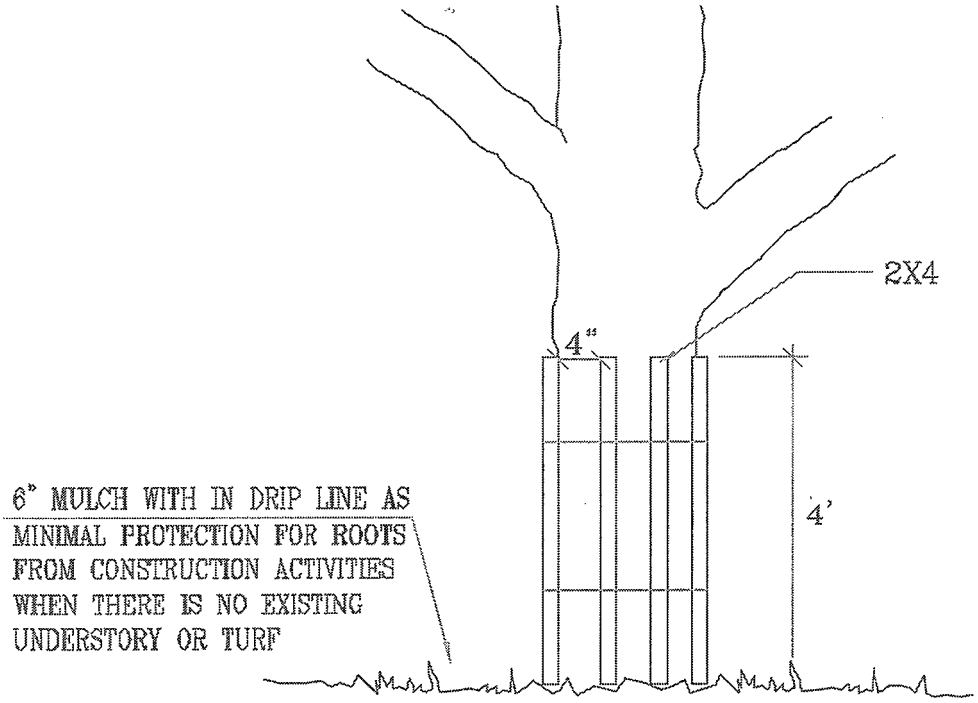


NOTE

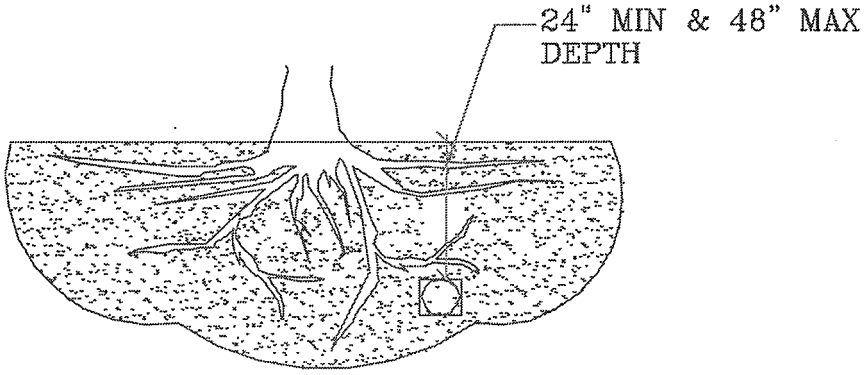
WRAP TREE TRUNK WITH 2"X4" STUDS AND ROPE OR BAND IN PLACE AS NEEDED TO PROTECT TREES IN WORK AREAS.

1.1.4 LEVEL II B FENCE PROTECTION

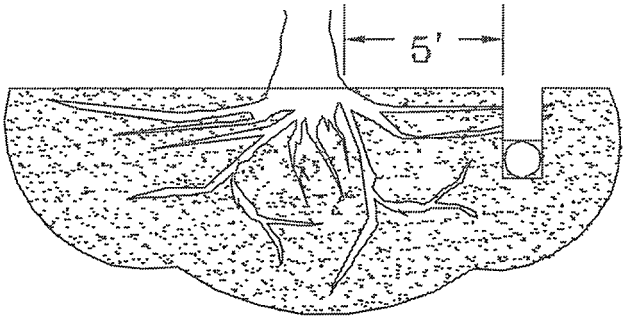
N. T. S.

TREES THAT ARE MARKED TO BE PRESERVED ON A SITE PLAN AND FOR WHICH UTILITIES MUST PASS TROUGH THEIR ROOT PROTECTION ZONES MAY REQUIRE BOREING AS OPPOSED TO OPEN TRENCHES. THE DECISION TO BORE WILL BE DETERMINED ON A CASE BY CASE BASIS BY THE CITY.

BORES SHALL BE DUG THROUGH THE ROOT PROTECTION ZONE IN ORDER TO MINIMIZE ROOT DAMAGE.



BORE TO MINIMIZE ROOT DAMAGE (TOP) AS OPPOSED TO SURFACE-DUG TRENCHES IN ROOT PROTECTION ZONE WHEN THE 5' MINIMUM DISTANCE FROM TRUNK CAN NOT BE ACHIEVED.



OPEN TRENCHING MAY BE USED IF EXPOSED TREE ROOTS DO NOT EXCEED 3" OR ROOTS CAN BE BENT BACK.

1.2 BORING THRU TREE ROOT ZONE

N. T. S.

GENERAL NOTES

1. ALL PROTECTED SIZE TREES AFFECTED BY CONSTRUCTION SHALL HAVE THE LIMBS AND ROOTS TRIMMED AND PRUNED ACCORDING TO ITEM No. 802. (TREE PRUNING, SOIL AMENDING AND FERTILIZATION), UNLESS SPECIFIED TREES SHALL RECEIVE LEVEL 1 PROTECTION AS PER ITEM No. 801. (TREE AND LANDSCAPE PROTECTION) AND AS DETAILED IN 1.1.2.

2. ALL TREES SHALL REMAIN UNLESS NOTED ON THE CITY APPROVED PLANS.

3. NO SITE PREPARATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND PROTECTION MEASURES HAVE NOT BEEN COMPLETED AND APPROVED BY THE CITY ARBORIST OFFICE.

4. TREE PROTECTION FENCING SHALL BE MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION.

5. THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN THREE INCHES (3") IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN THE VICINITY OF TREES SHALL PROCEED WITH CAUTION. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR IF ROOTS LARGER THAN THREE INCHES (3") WITHIN THE FIVE FOOT (5') ROOT PROTECTION ZONE NEED TO BE PRUNED.

6. THE ROOT PROTECTION ZONE IS THAT AREA SURROUNDING A TREE, AS MEASURED BY A RADIUS FROM THE TREE TRUNK, IN WHICH NO EQUIPMENT, VEHICLES OR MATERIALS MAY OPERATE OR BE STORED. THE REQUIRED RADIUS LENGTH IS ONE FOOT (1') PER DIAMETER INCH OF THE TREE. FOR EXAMPLE, A TEN INCH (10") DIAMETER TREE WOULD HAVE A TEN FOOT (10') RADIUS ROOT PROTECTION ZONE AROUND THE TREE. ROOTS OR BRANCHES THAT ARE IN CONFLICT WITH THE CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. OAK WOUNDS SHALL BE PAINTED OVER, WITHIN TWENTY (20) MINUTES TO PREVENT OAK WILT.

7. NO DISTURBANCE SHALL OCCUR CLOSER TO THE TRUNK THAN HALF THE ROOT PROTECTION ZONE AREA.

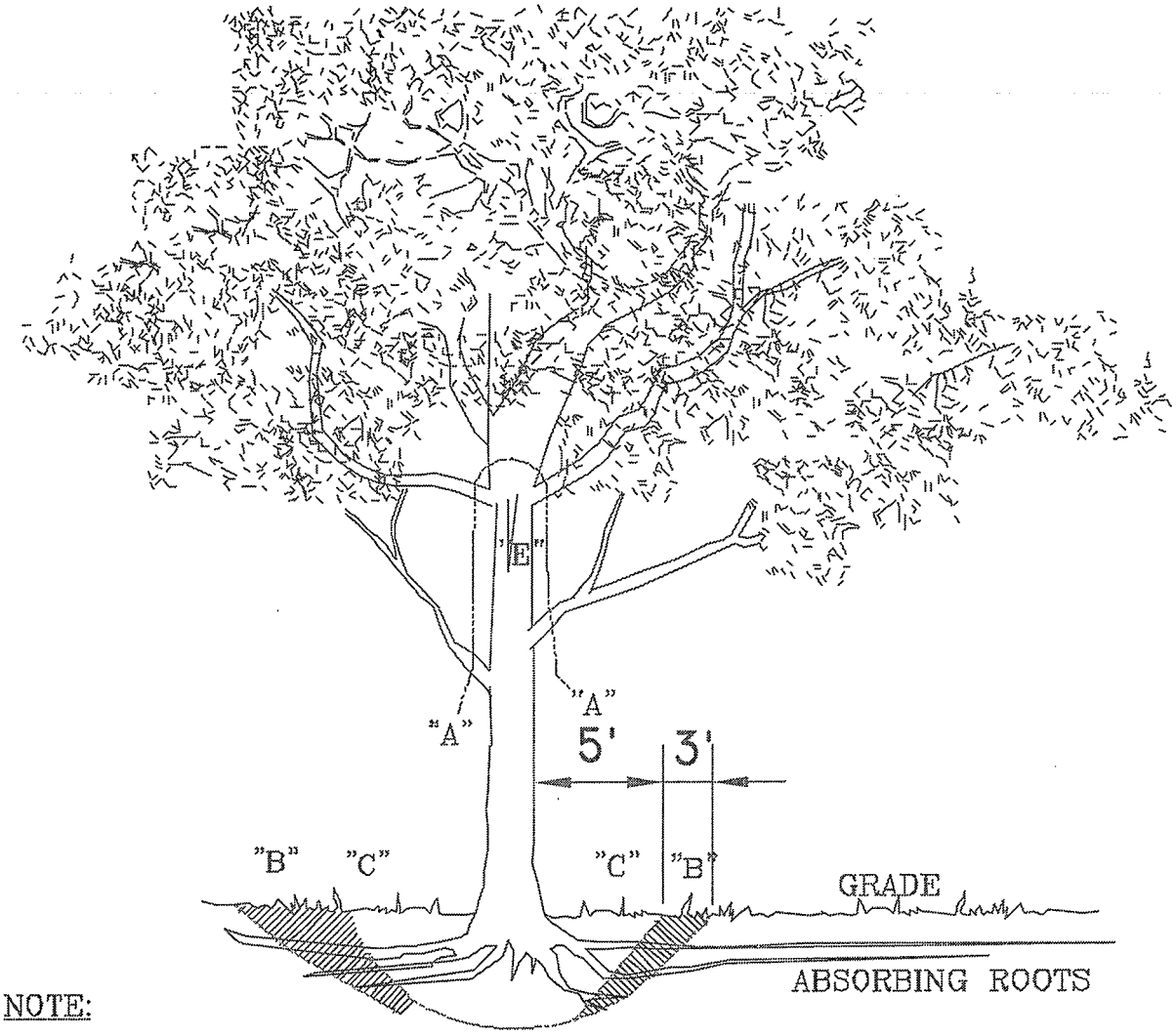
8. TREES, SHRUBS OR BUSHES TO BE CLEARED FROM PROTECTED ROOT ZONE AREAS SHALL BE REMOVED BY HAND.

9. TREES DAMAGED OR LOST DUE TO CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED.

10. EXPOSED ROOTS SHALL BE COVERED AT THE END OF EACH DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH OR WET BURLAP.

11. ANY TREE REMOVAL SHALL BE APPROVED BY THE CITY ARBORIST OFFICE PRIOR TO ITS REMOVAL.

1.3 GENERAL NOTES



NOTE:

A" REMOVE BULKY TREE PARTS "SHRED" AND/OR HAUL SEPARATELY.

"B" BEGIN EXCAVATION APPROX. 8' FROM THE TRUNK – CUT THRU ANCHOR ROOTS AT AN ANGLE – 3' TO 4' DEEP

"C" USING TREE TRUNK AS A LEVER PUSH AT POINT "E" TO REMOVE TREE BOLE AND LARGE FEEDER ROOTS (4" TO 10" IN DIAM.)

"D" BACKFILL HOLE AND CLEAN UP.

1.3 TREE REMOVAL DIAGRAM

N. T. S.

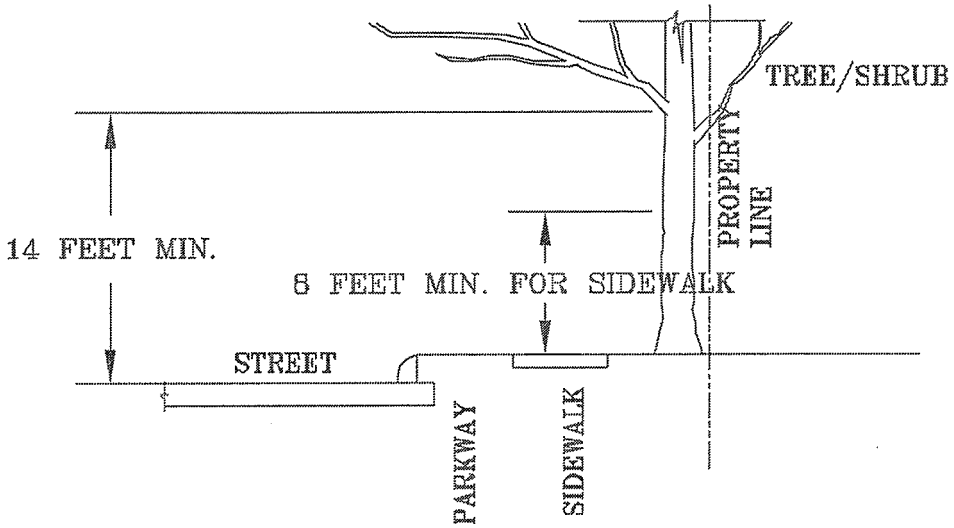
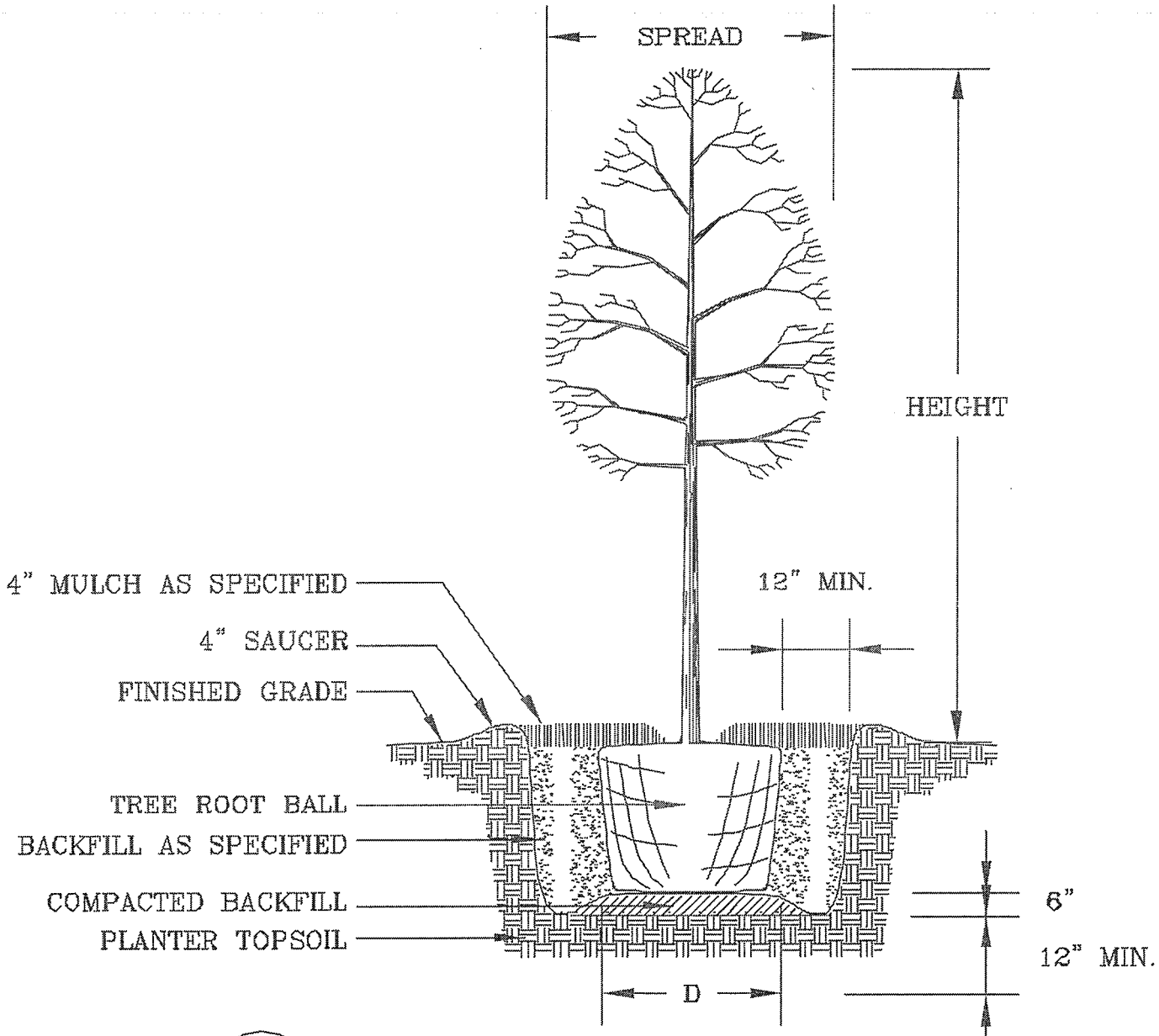


FIGURE No.2:

A MINIMUM BRANCH CLEARANCE OF 14 FEET ABOVE STREET ELEVATION MUST BE MAINTAINED FROM THE PROPERTY LINE TO THE CURB LINE AS PRESCRIBED BY PROJECT MANAGER.

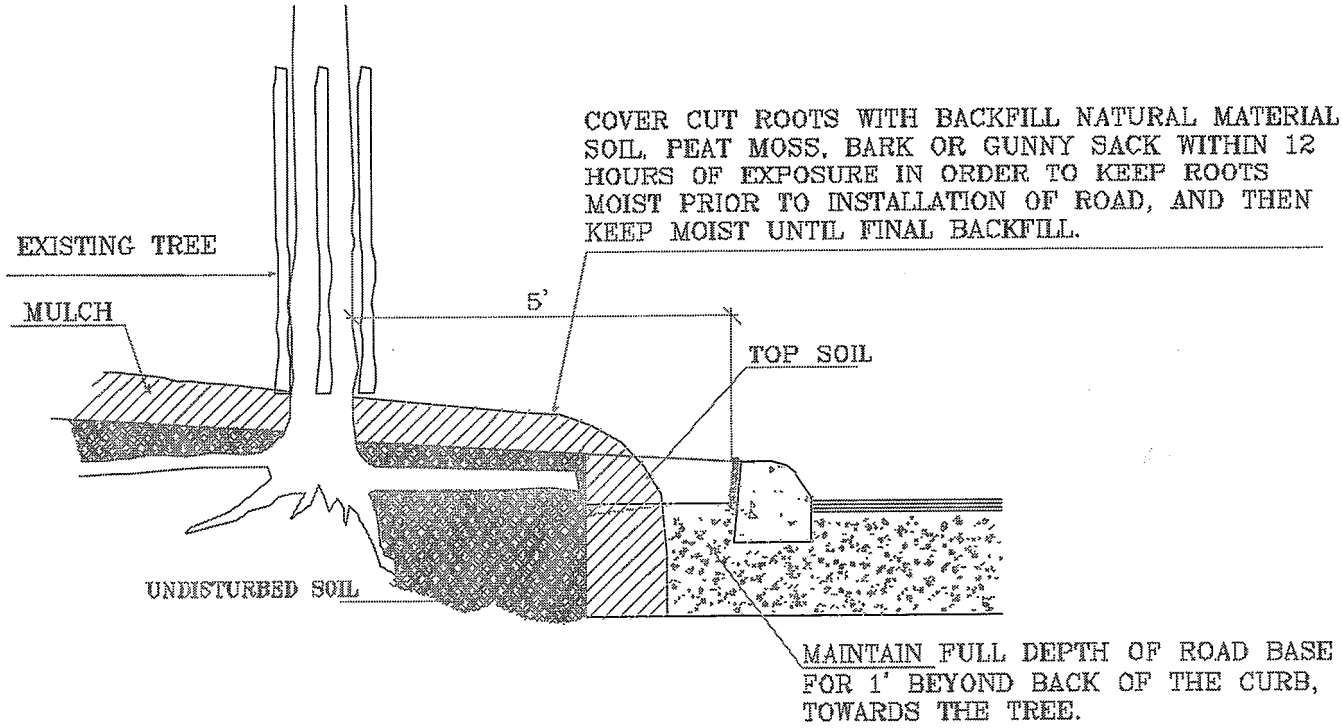
1.5 BRANCH CLEARANCE DETAIL

N. T. S.



1.6 NEW TREE PLANTING DETAIL

N. T. S.

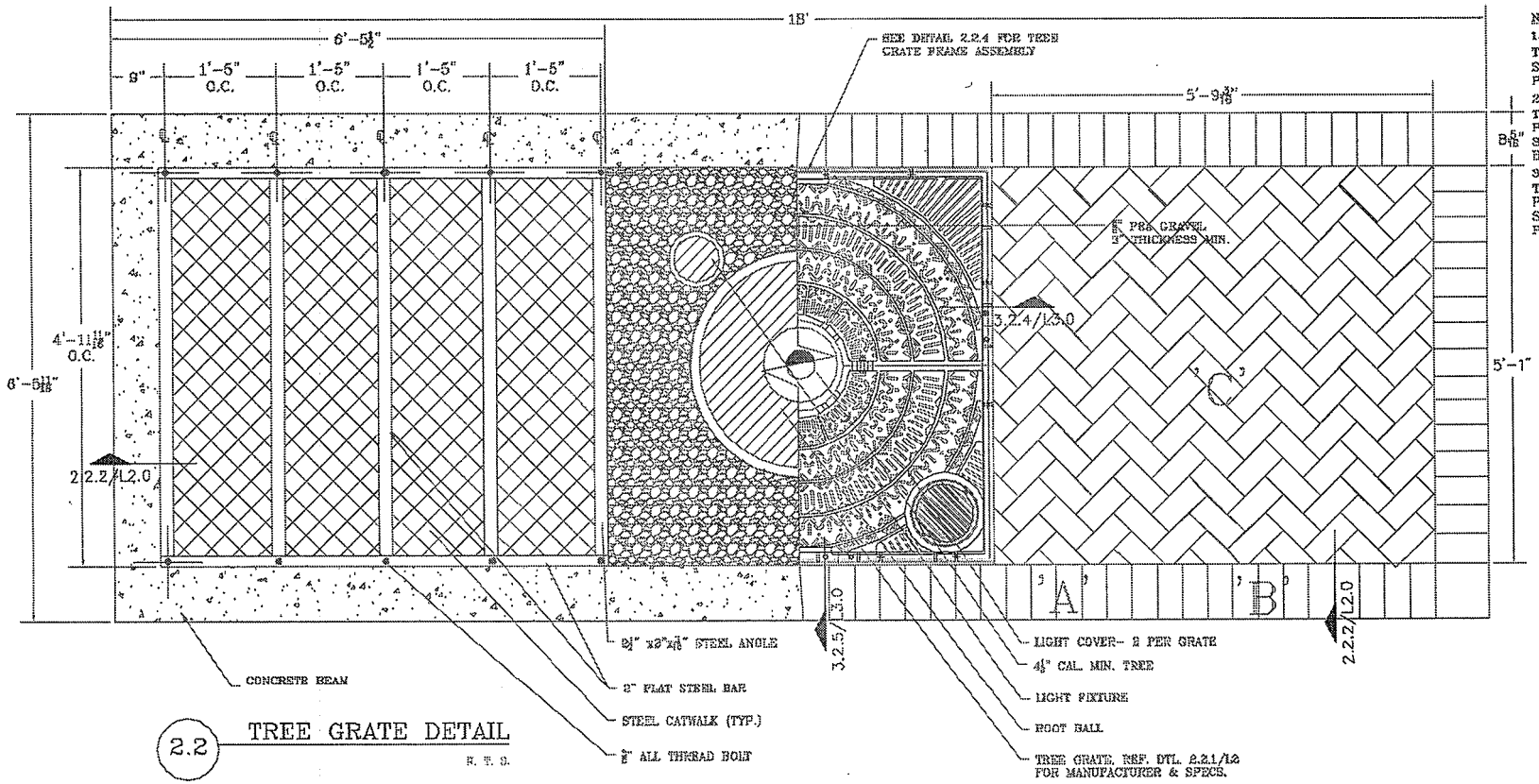


NOTE: ROOT ZONE OUTSIDE OF TREE PROTECTION BARRIER SHOULD BE COVERED AT ALL TIMES WITH 8" OF BARK MULCH THROUGHOUT THE CONSTRUCTION PHASE. EXISTING TREES SHOULD BE DEEP WATERED AS SPECIFIED IN ITEM 801 & 802

2.1 EXPOSED ROOT PROTECTION DETAIL

N. T. S.

NOTE:
FOR THOSE TREES THAT DO NOT MEET THE TREE PRESERVATION ORDINANCE REQUIREMENTS PRESERVATION SHALL BE DETERMINED ON A CASE BY CASE BASIS

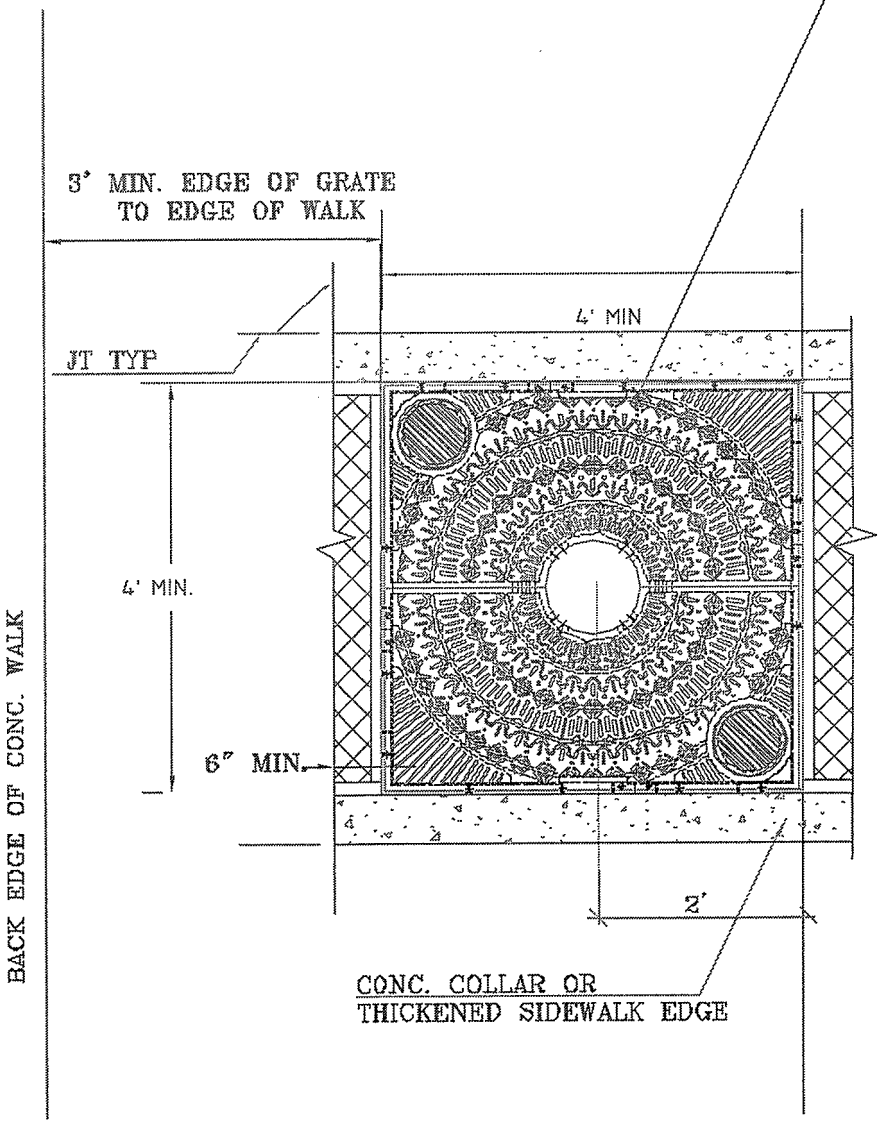


NOTES:

1. PAVER 'A': $8\frac{5}{16}$" - $2\frac{3}{8}$" THICKNESS CONC. PAVER(CITY STONE II) CASTONE COLOR, BY PAVESTONE. 1-800-530-PAVE.
2. PAVER 'B': $4\frac{5}{16}$" X $8\frac{5}{16}$" - $2\frac{3}{8}$" THICKNESS, PATTERN AS SHOWN ON PLAN, CONC. PAVER(HOLLAND STONE) CAST STONE COLOR, MANUF. BY PAVESTONE.
3. PAVER 'C': $4\frac{5}{16}$" X $8\frac{5}{16}$" - $2\frac{3}{8}$" THICKNESS, 45° HERRINGBONE PATTERN. CONC. PAVER(HOLLAND STONE), ANTIQUE COLOR, MANUF. BY PAVESTONE.

2.2 TREE GRATE DETAIL

N. T. S.



TREE GRATE, NEENAH FOUNDRY, MODEL R-8754.
1-800-558-5075

DIMENSIONAL REQUIREMENTS:
- 25 SQ. FT MIN. TREE GRATE SIZE (5'X5' & 4'X6' TYP).

- 2'-0" MIN. REQUIRED BETWEEN EXISTING TREE CENTER LINE AND FACE OF CURB.

- 2'-0" MIN. REQUIRED BETWEEN EXISTING TREE CENTER LINE & CONC. PAVEMENT (SIDE WALK OR CON. COLLAR).

-4'-0" MIN. CONC. WALKING SURFACE.

-1'-0" MIN. CENTER GRATE OPENING (1'-6" RECOMMENDED).

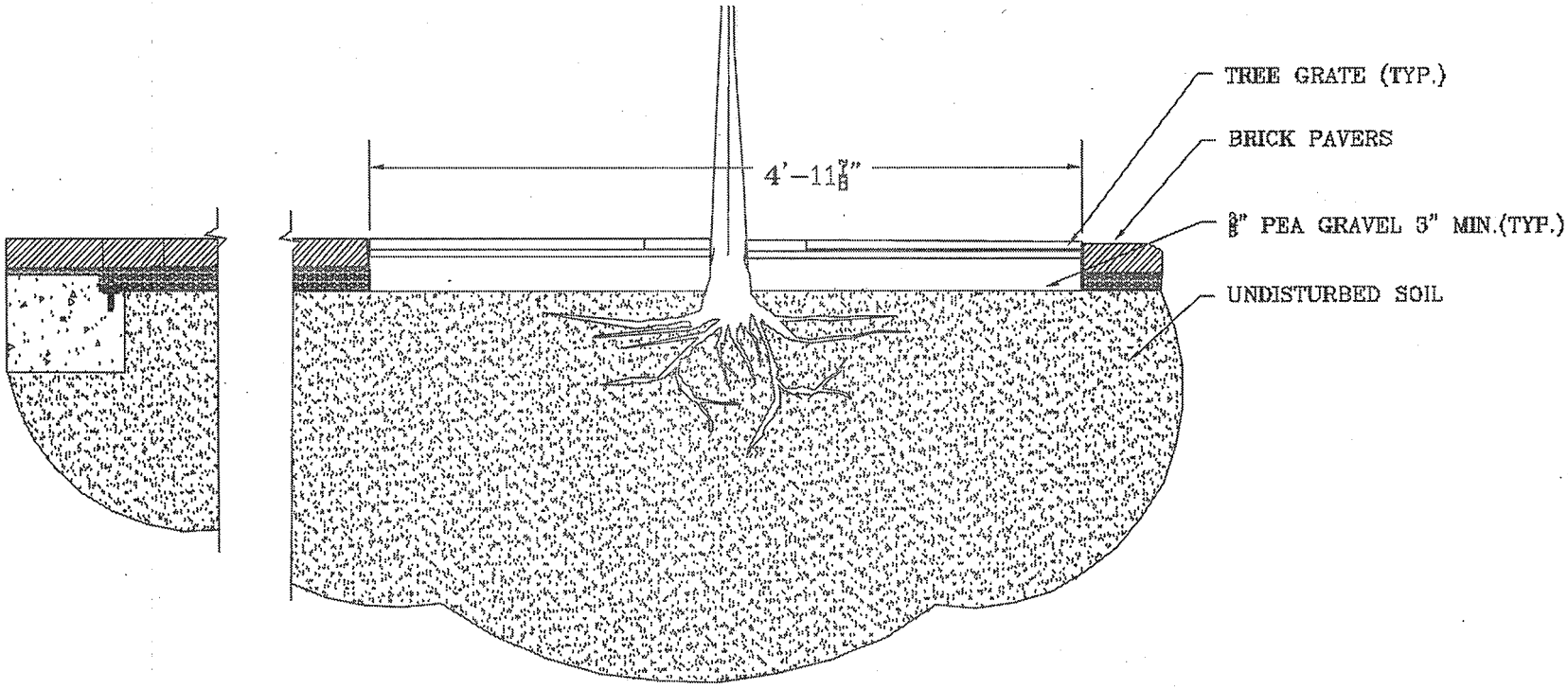
NOTE:
INSTALLATIONS REQUIRING LESS THAN STANDARD MIN. CLEARANCES SHALL BE ALLOWED ONLY WITH SPECIFIC APPROVAL BY THE ENGINEER.

NOTE:
SEE SHEET 2 DETAIL 4 FOR SUBSURFACE TREATMENT OF WALK.

NOTE:
FOR THOSE TREES THAT DO NOT MEET THE TREE PRESERVATION ORDINANCE REQUIREMENTS PRESERVATION SHALL BE DETERMINED ON A CASE BY CASE BASIS

2.2.1 TREE GRATE PLAN VIEW

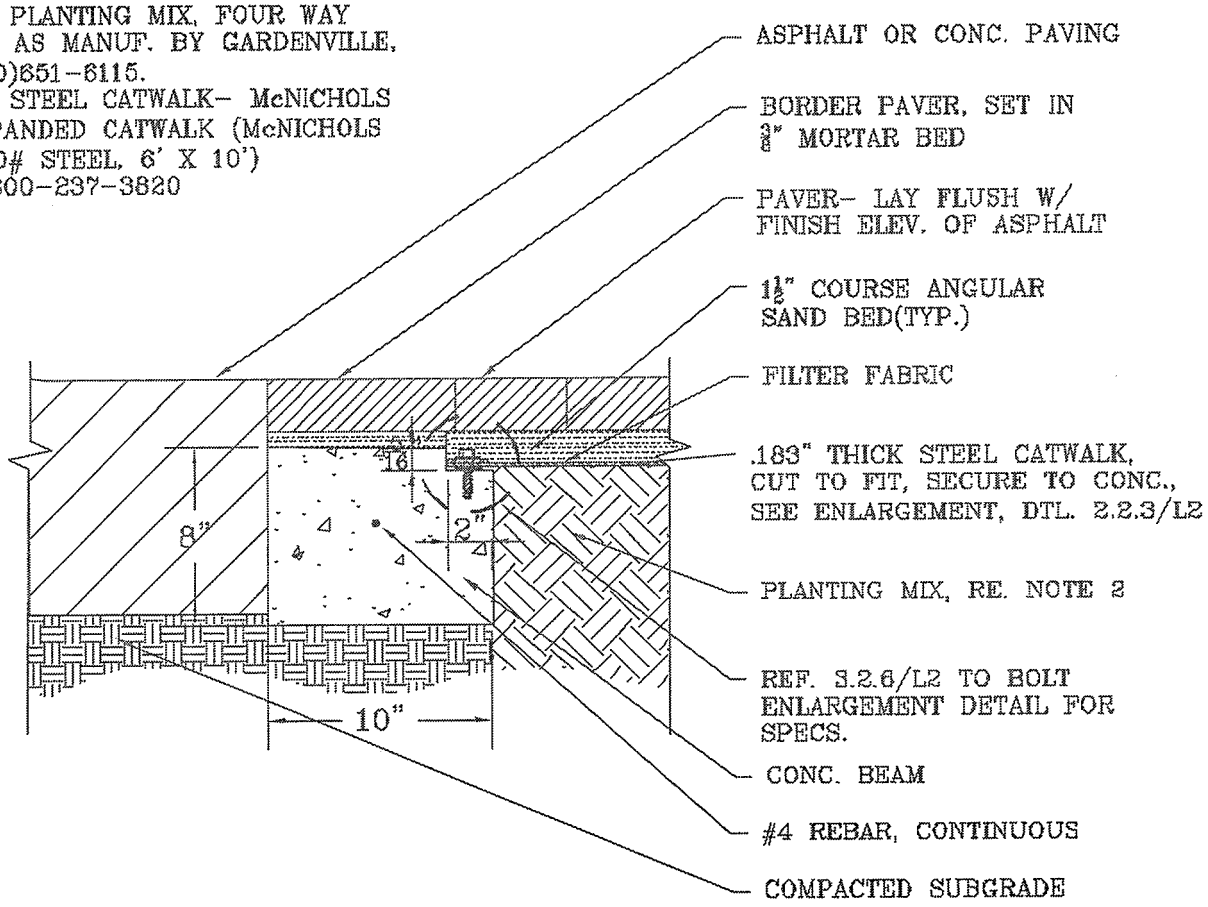
N. T. S.



2.2.3 TREE WELL SECTION

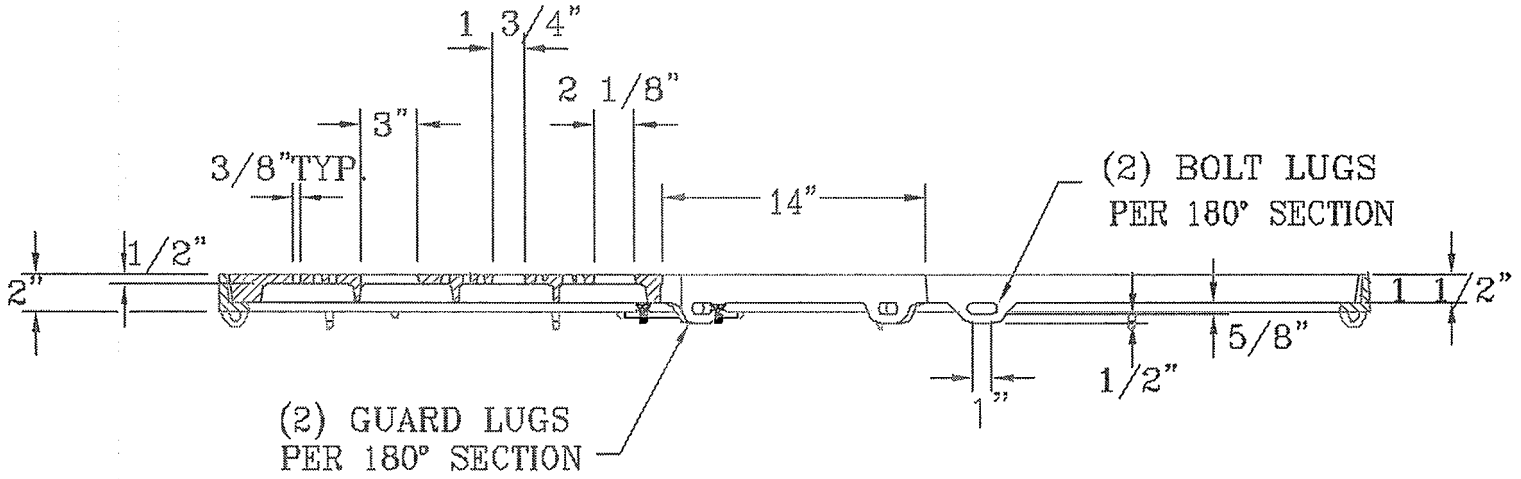
N. T. S.

NOTES:
1. COMPACT, VIBRATE & SWEEP SAND INTO JOINTS.
2. PLANTING MIX, FOUR WAY MIX AS MANUF. BY GARDENVILLE, (210)651-6115.
3. STEEL CATWALK- McNICHOLS EXPANDED CATWALK (McNICHOLS 3.00# STEEL, 6' X 10')
1-800-237-3820



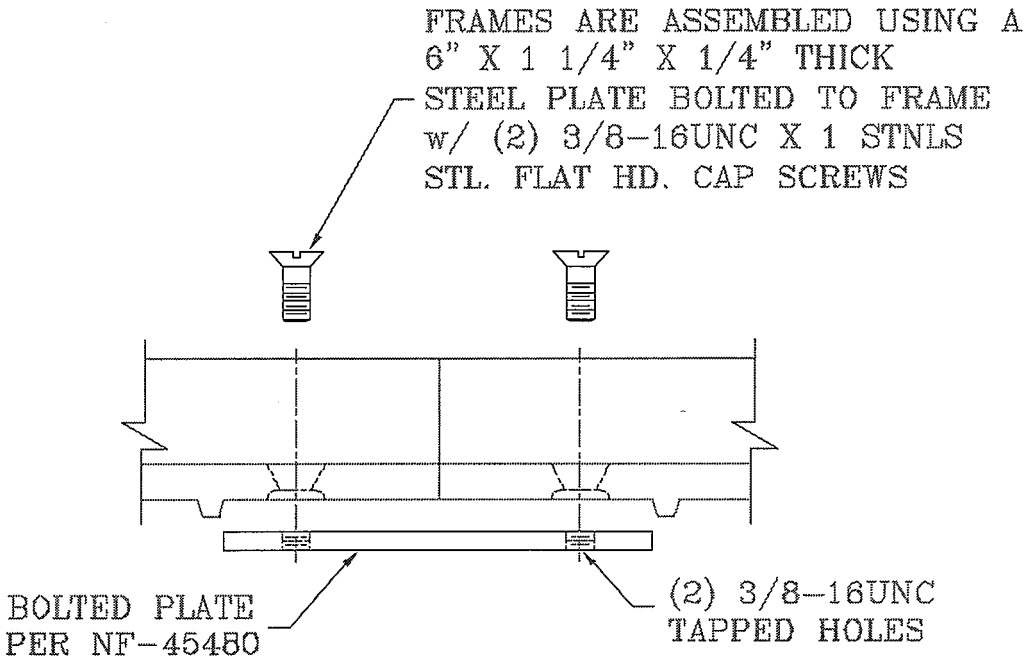
2.2.2 SECTION: PAVER @ ASPHALT

N. T. S.



2.2.4 SECTION: TREE GRATE FRAME

N. T. S.

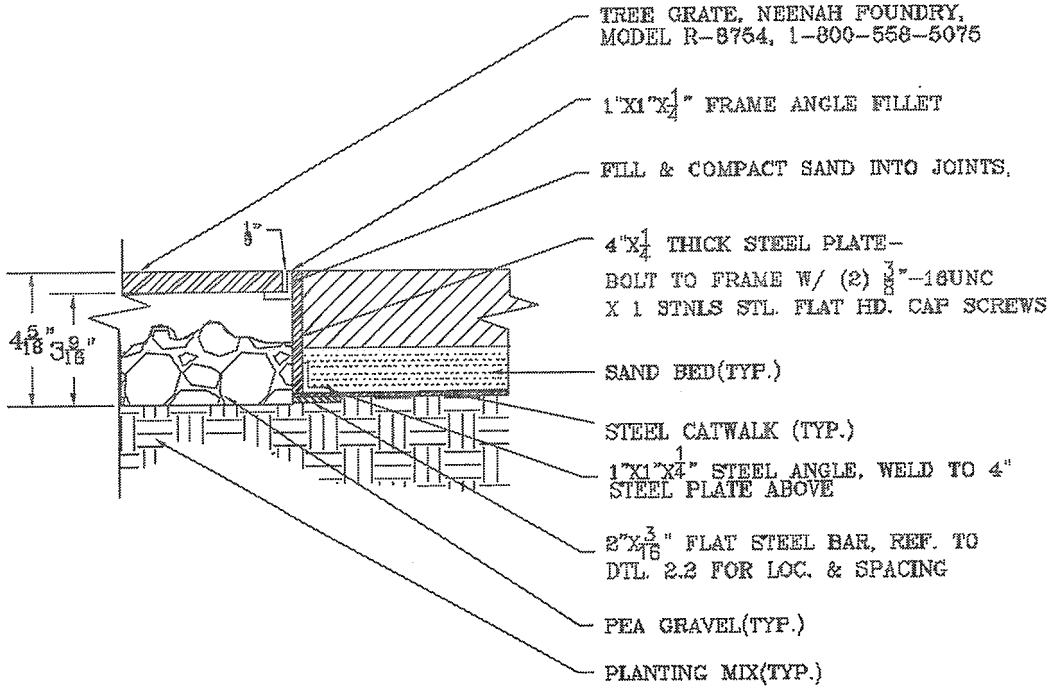


2.2.5 SECTION: GRATE FRAME ASSEMBLY

N. T. S.

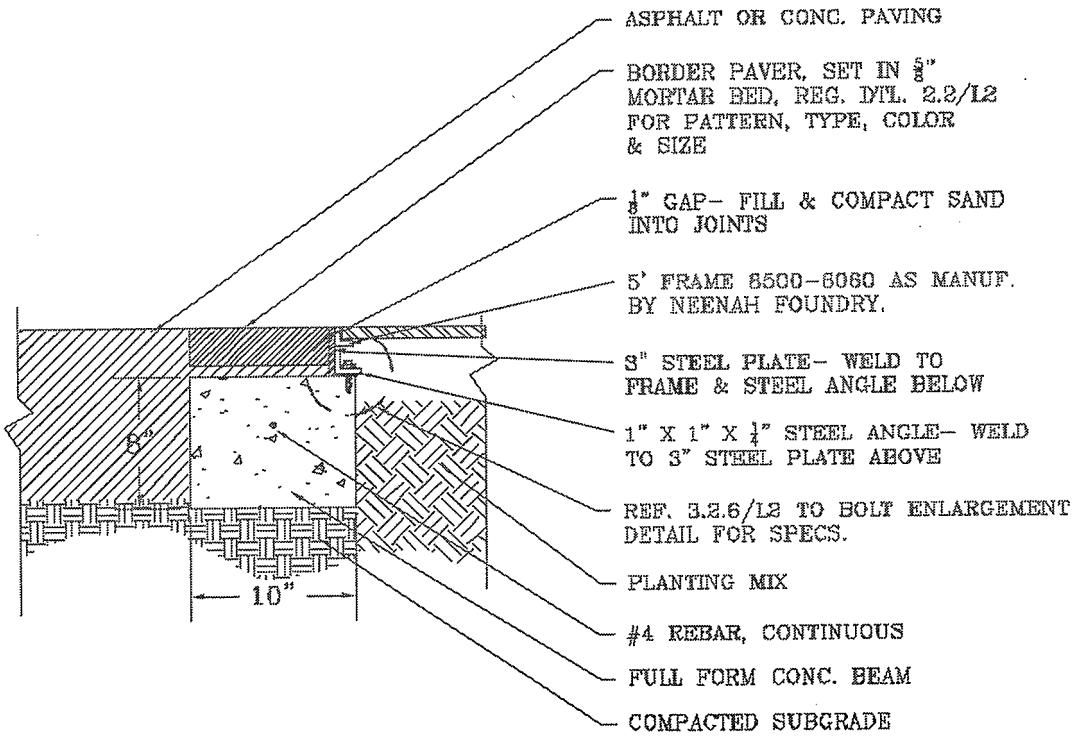
NOTES:
1. 5' FRAME 8500-8060 AS MANUFACTURED BY NEENAH FOUNDRY.

2. REMOVE CROSSBAR FROM FRAME BEFORE INSTALLATION.



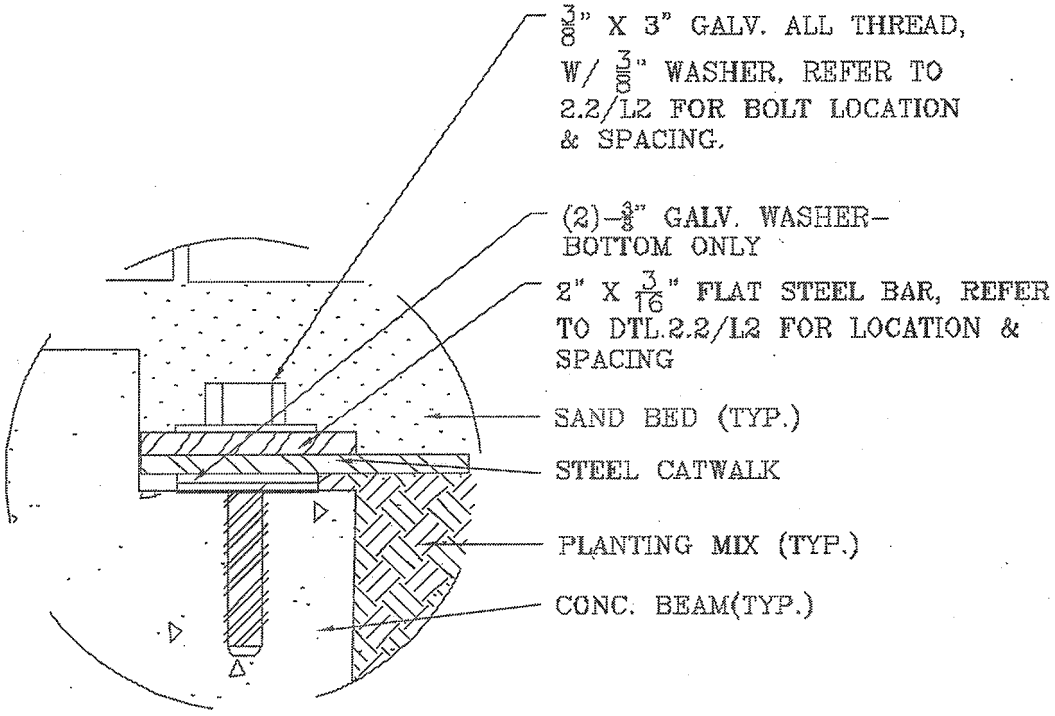
3.2.4 TREE GRATE/FRAME @ PAVERS

N. T. S.



3.2.5 SECTION: PAVER @ TREE GRATE

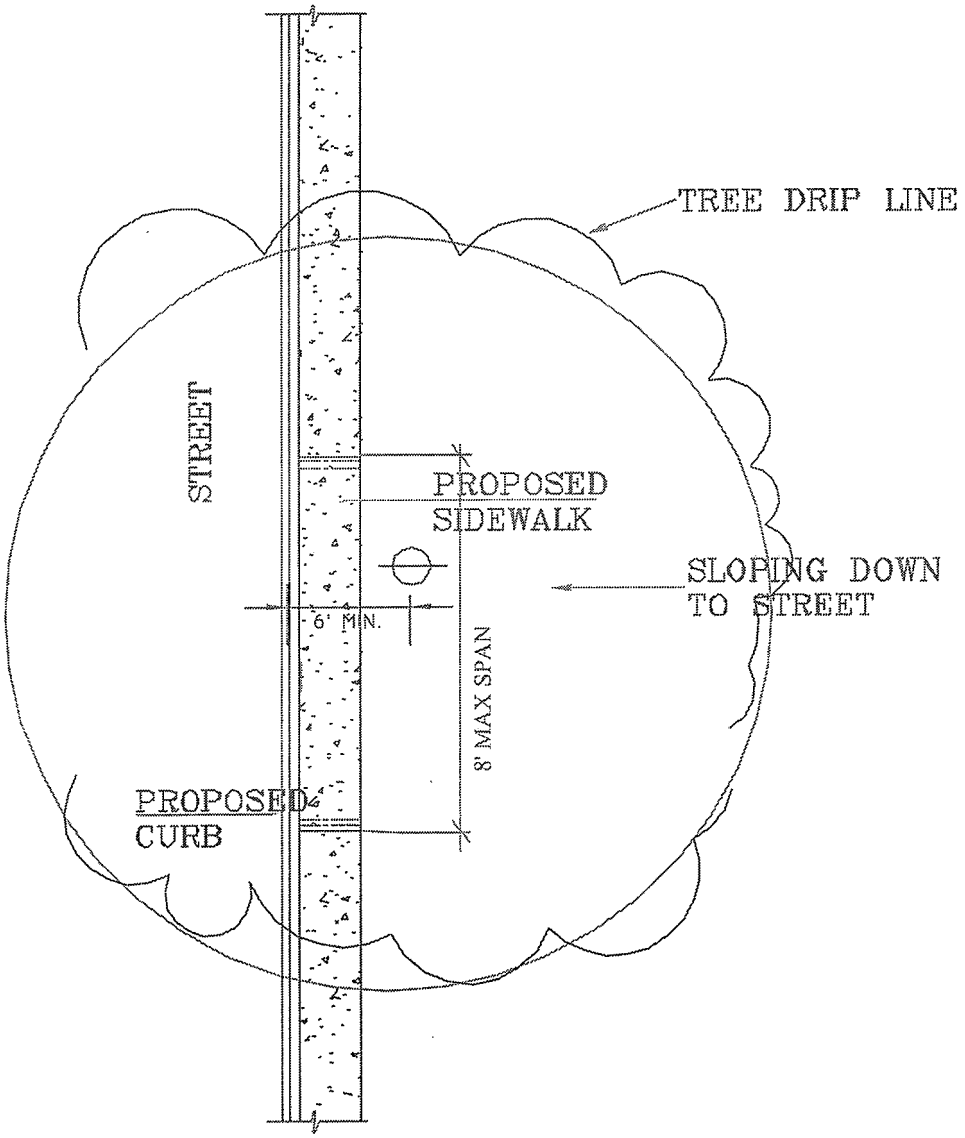
N. T. S.



3.2.6 DETAIL: BOLT/CONC. CONNECTION

N. T. S.

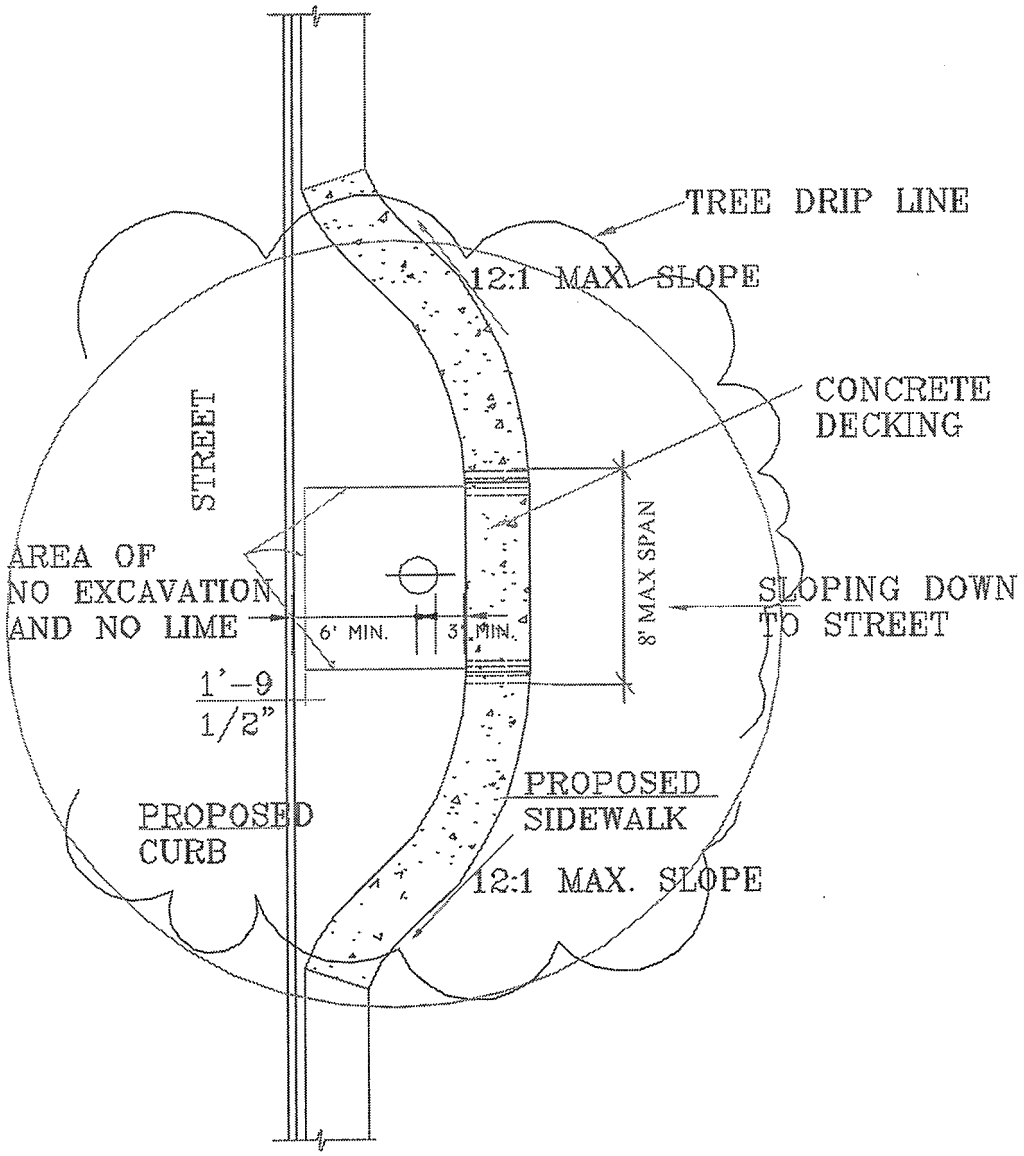
AREA BENEATH PROPOSED SIDEWALKS IN THE DRIP LINE OF AN EXISTING TREE SHALL RECEIVE TREE VENTING AS PER OPTIONS ON THESE SHEETS.



3.3 ELEVATED WALKWAY

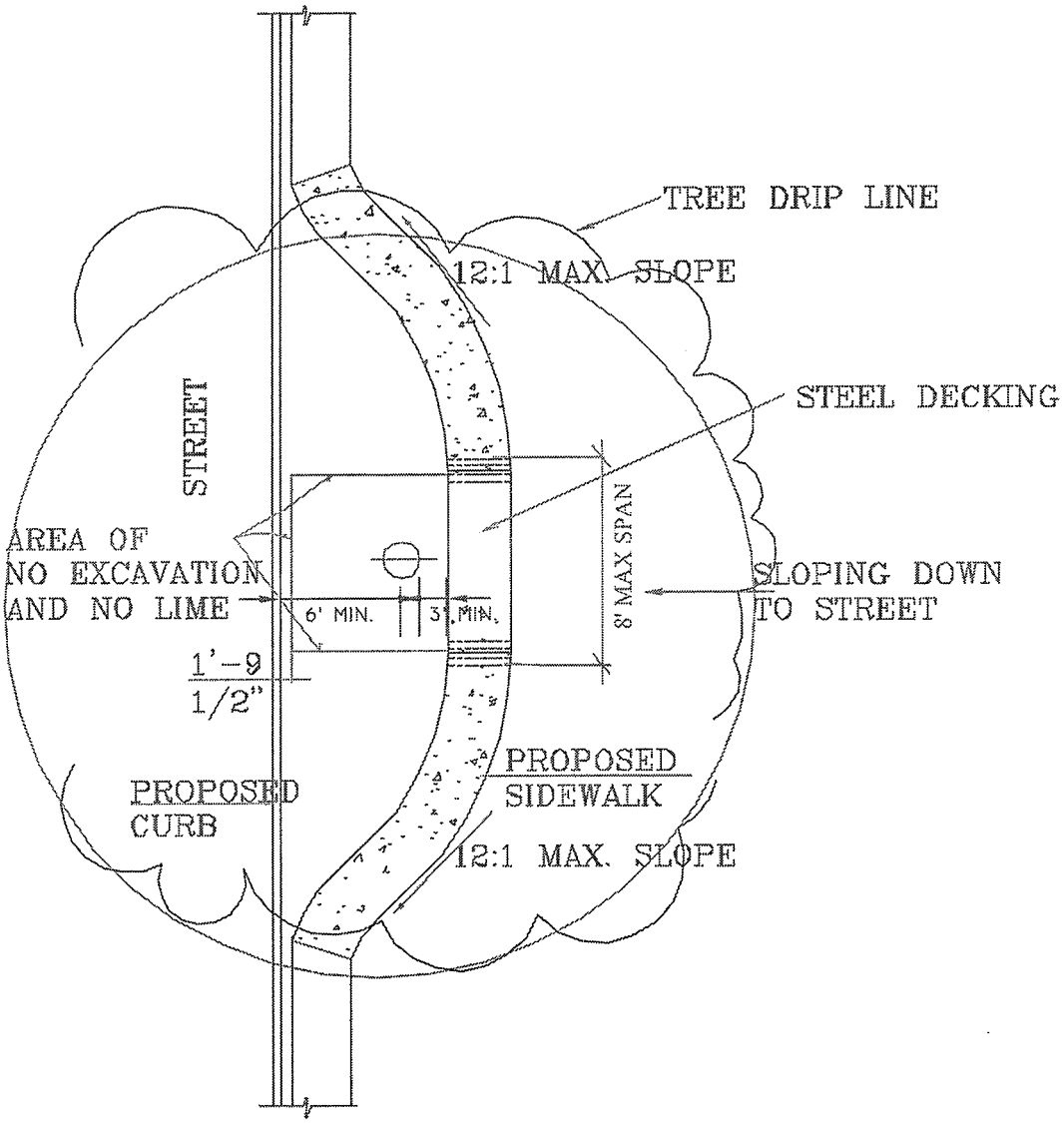
N. T. S.

AREA BENEATH PROPOSED SIDEWALKS IN THE DRIP LINE OF AN EXISTING TREE SHALL RECEIVE TREE VENTING AS PER OPTIONS ON THESE SHEETS.



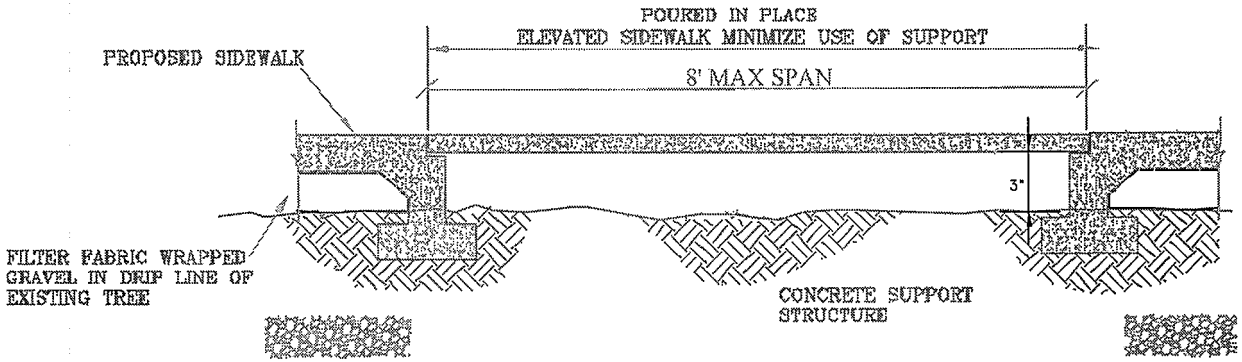
3.3.1 ELEVATED WALKWAY /CONCRETE DECKING N. T. S.

AREA BENEATH PROPOSED SIDEWALKS IN THE DRIP LINE OF AN EXISTING TREE SHALL RECEIVE TREE VENTING AS PER OPTIONS ON THESE SHEETS.



3.3.2 ELEVATED WALKWAY /STEEL DECKING N. T. S.

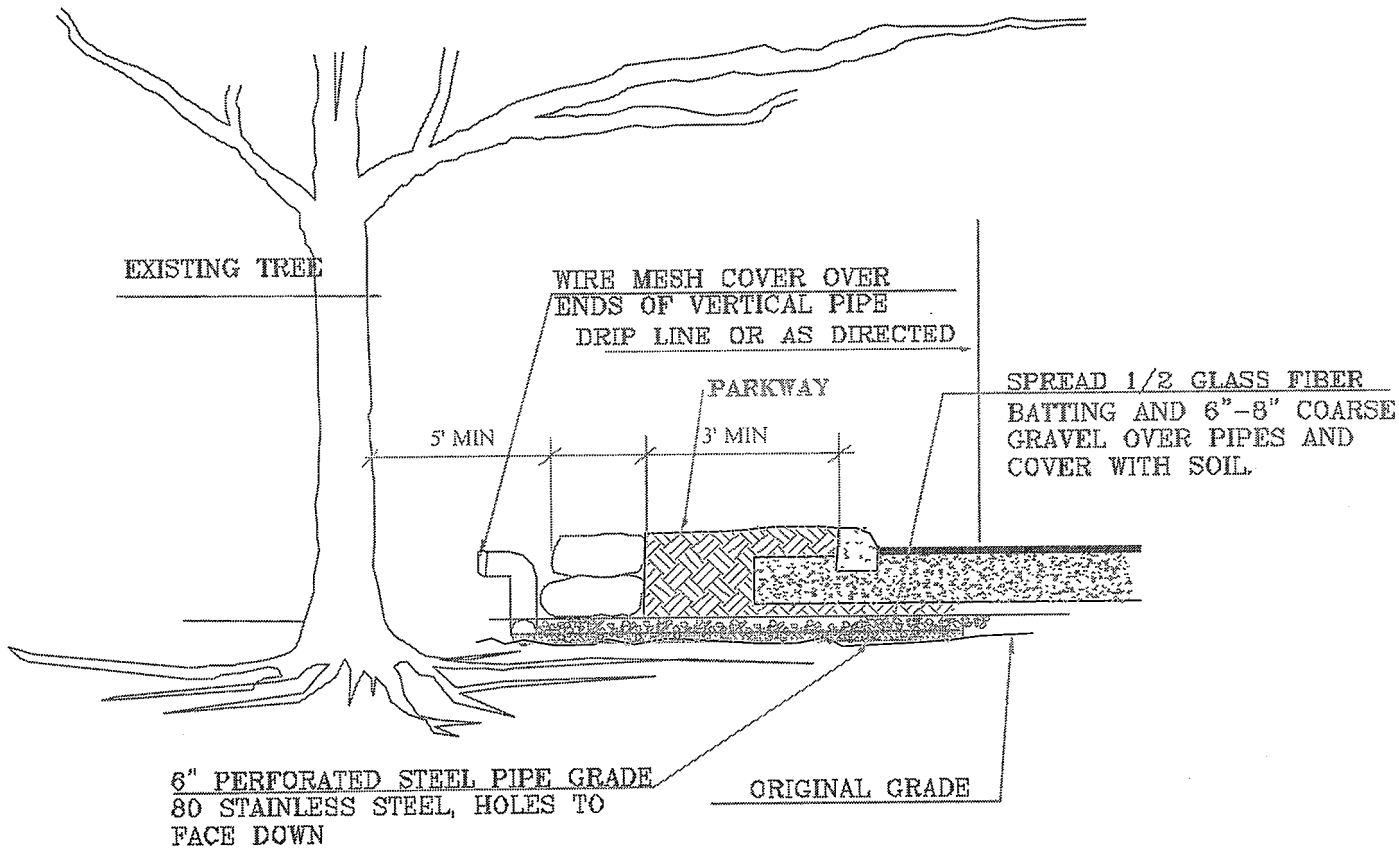
NOTE:
DESIGN STEEL PLATE SUPPORT ACCORDING TO SPECIFIED WIDTH AND LENGTH.



3.3.4 ELEVATED WALKWAY SECTION

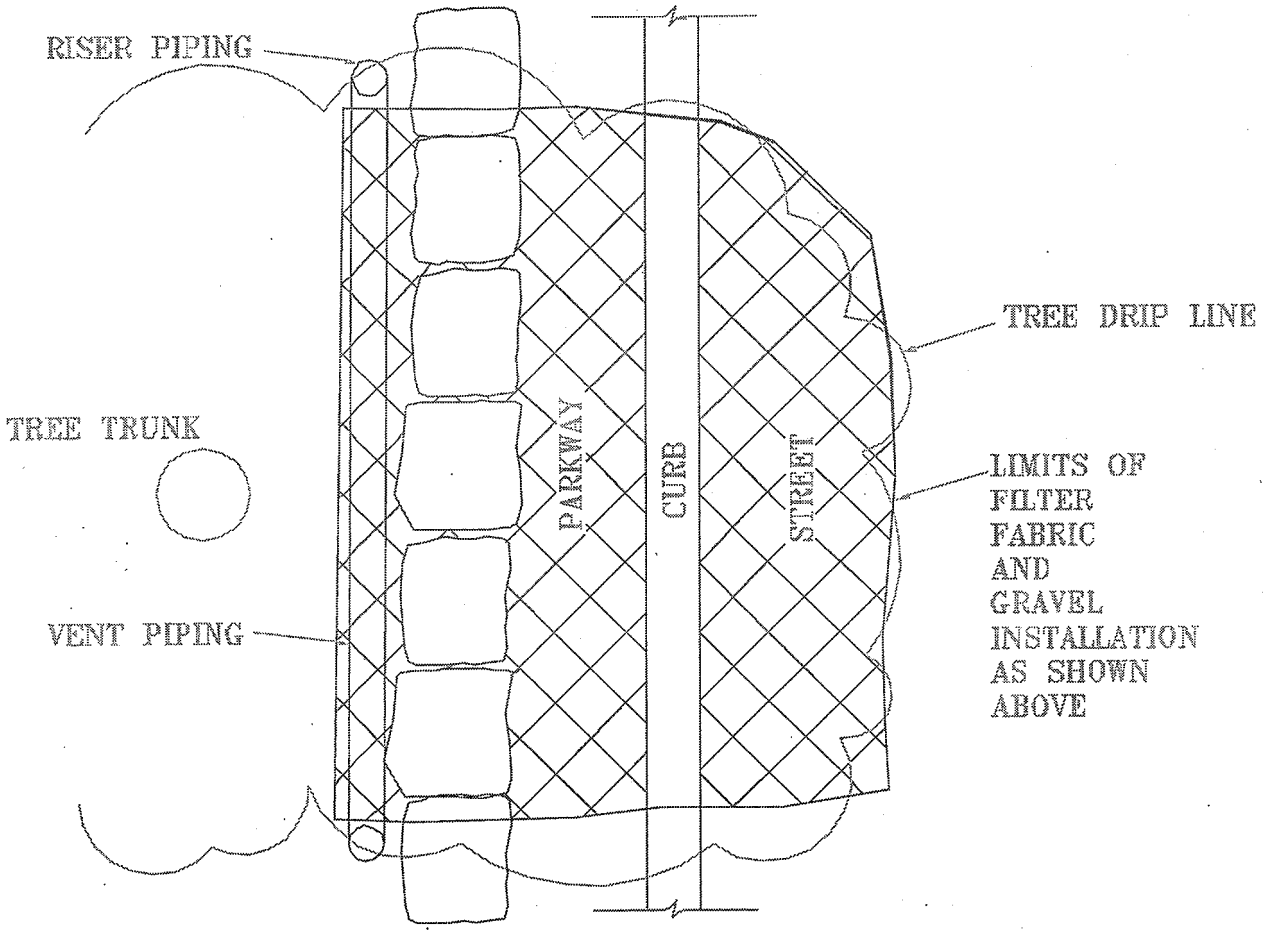
N. T. S.

NOTE:
FOR THOSE TREES THAT DO NOT MEET THE TREE PRESERVATION ORDINANCE REQUIREMENTS PRESERVATION SHALL BE DETERMINED ON A CASE BY CASE BASIS



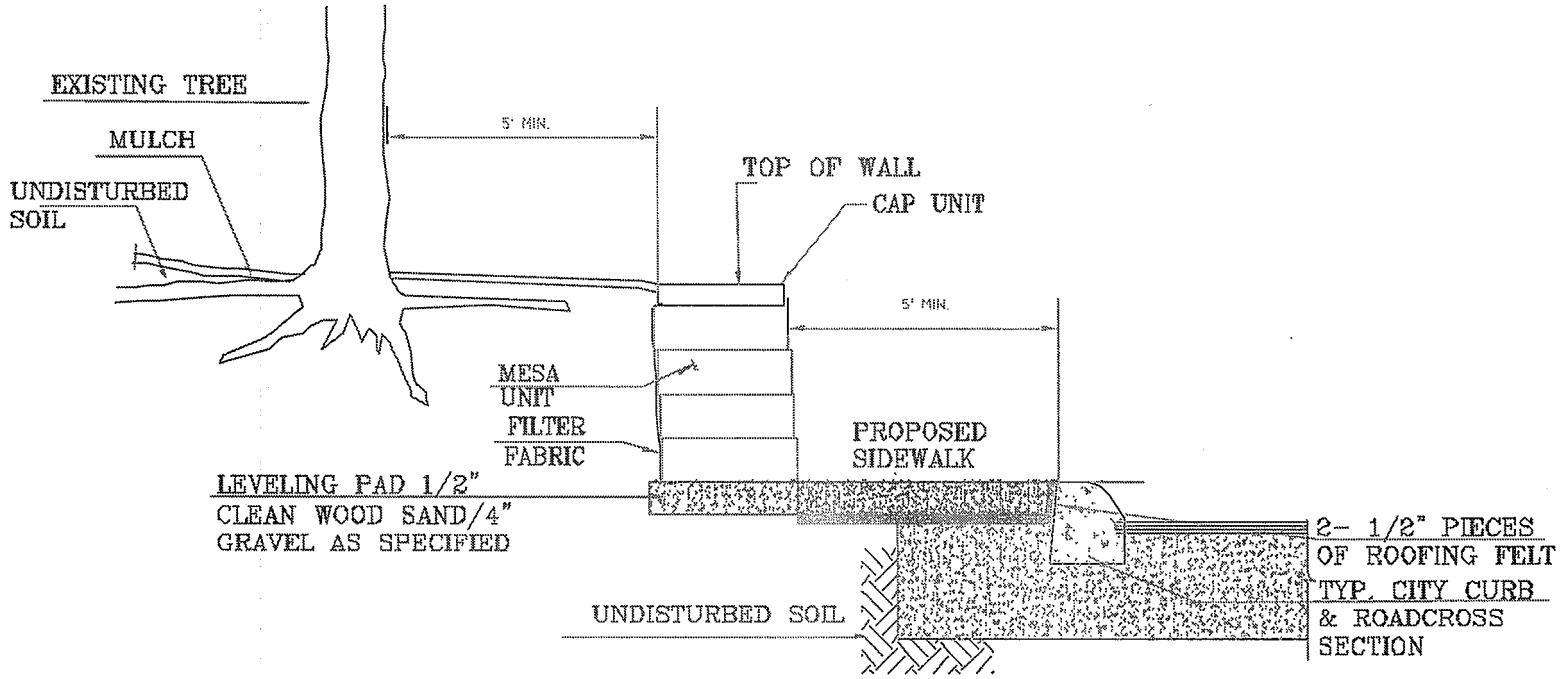
4.2 TREE AERATION DETAIL B

N. T. S.



4.2.2 PLAN VIEW B

N. T. S.



4.3

SEGMENTAL GRAVITY WALL

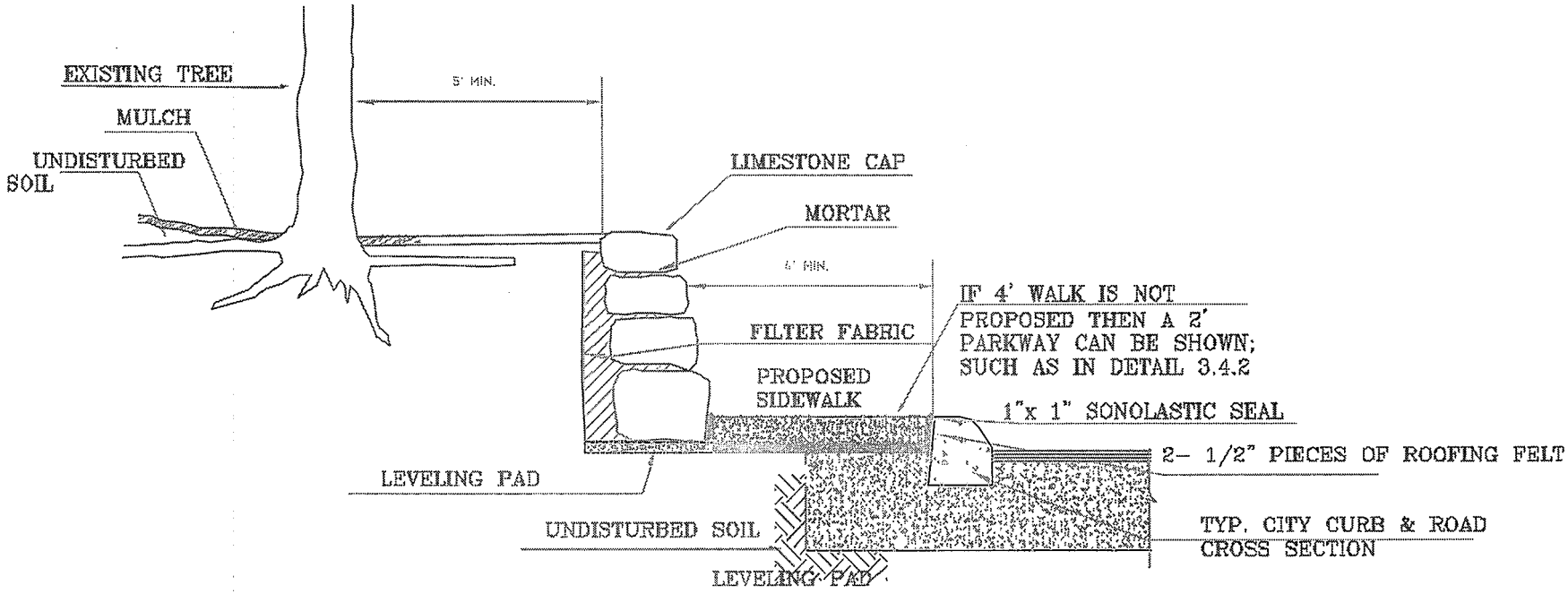
ADJACENT TO CURB

N. T. S.

NOTE-

THIS TYPE OF WALL CAN BE USED ON OTHER APPLICATIONS

TREES CANNOT BE PRESERVED IF THEY ARE CLOSER THAN 5 FEET TO THE WALL



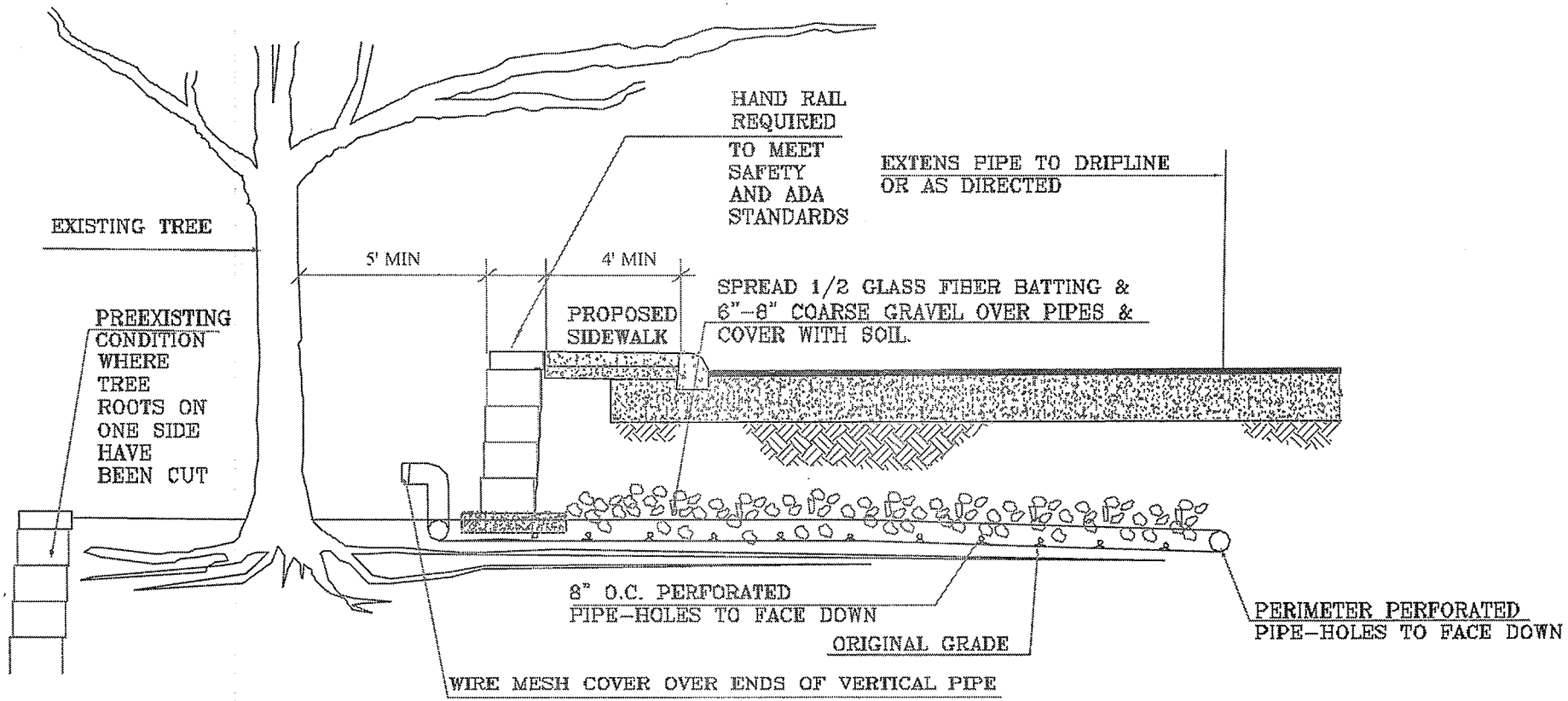
4.3.2

LIMESTONE BOULDER GRAVITY WALL

ADJACENT TO CURB

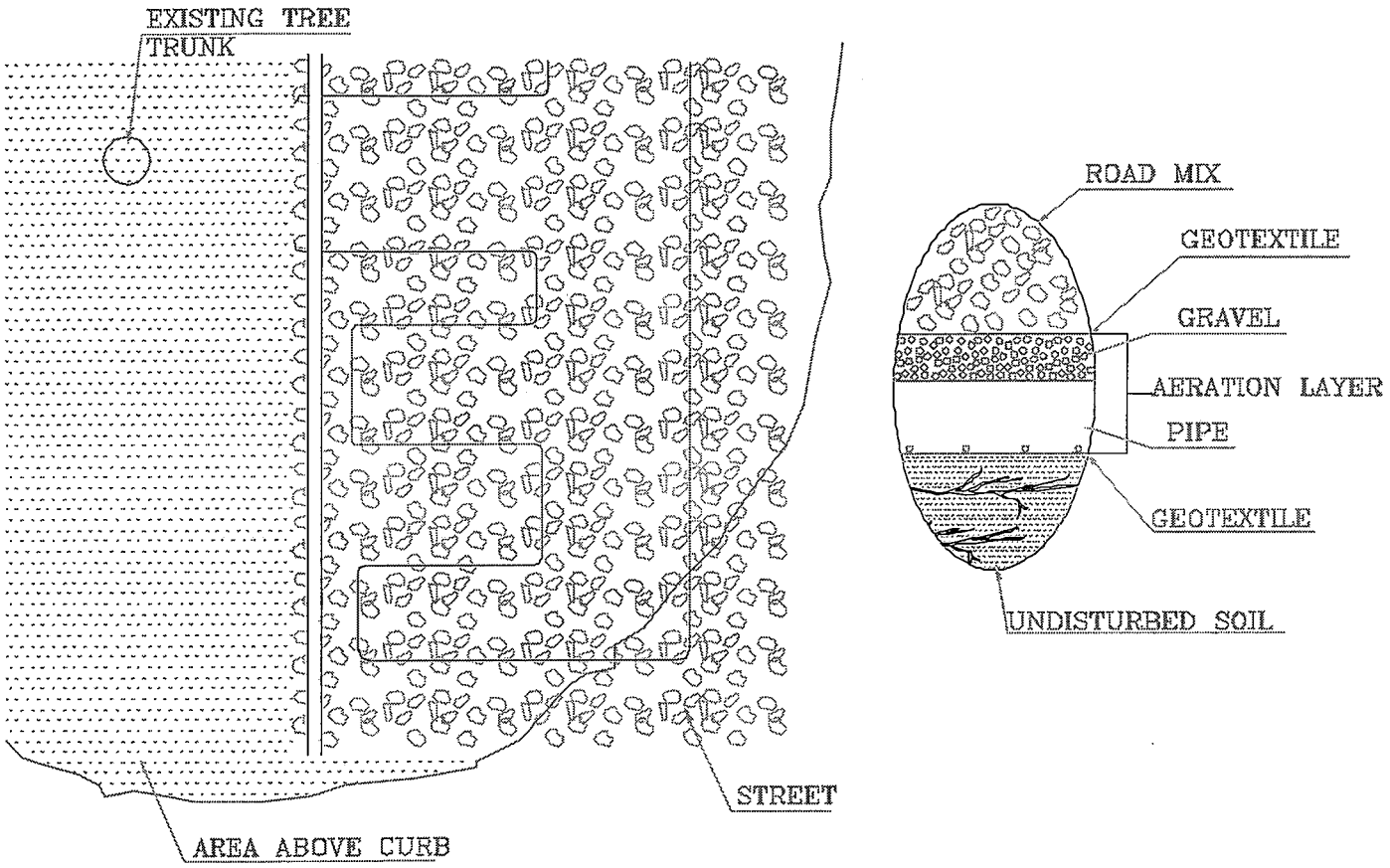
N. T. S.

NOTE-
THIS TYPE OF WALL CAN BE USED ON OTHER APPLICATIONS
TREES CANNOT BE PRESERVED IF THEY ARE CLOSER THAN 5 FEET
TO THE WALL



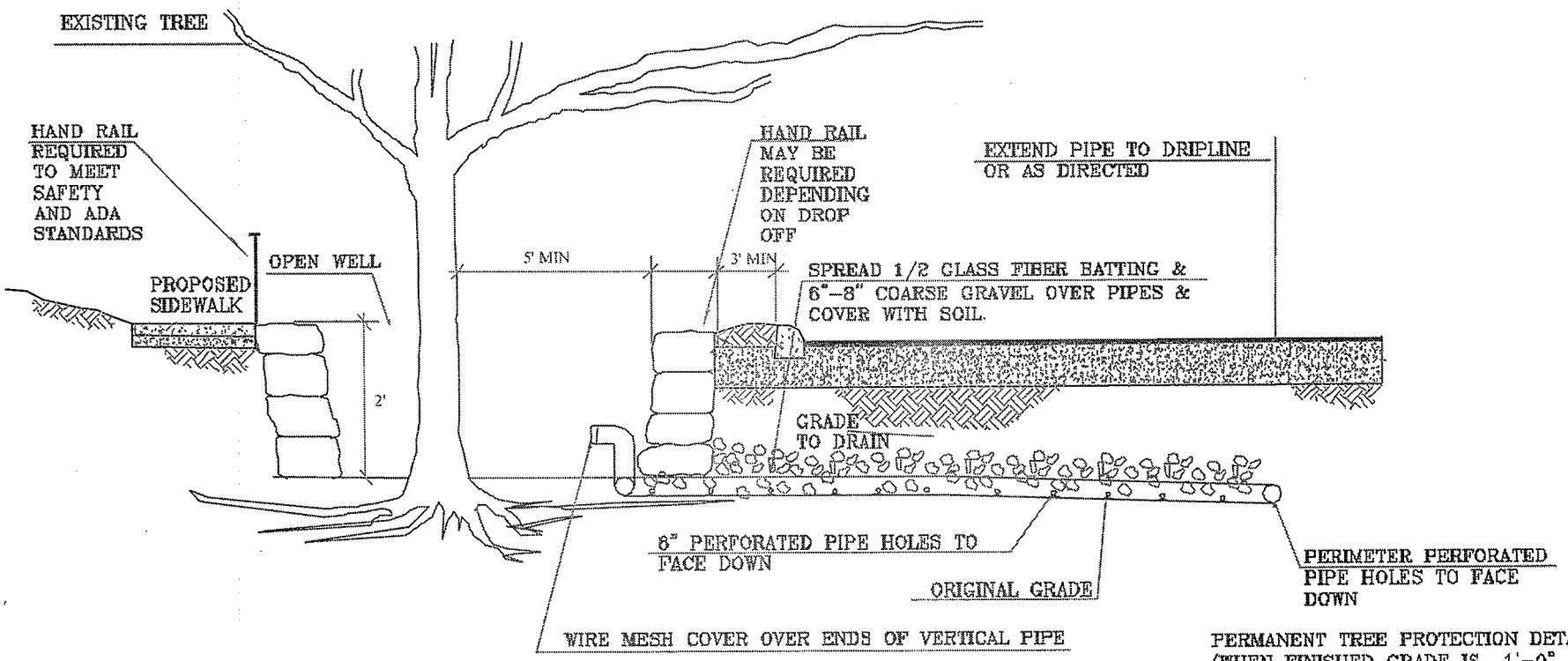
4.4 TREE AERATION DETAIL C

N. T. S.



4.4.1 TREE AERATION PLAN VIEW D

N. T. S.



4.4.2 TREE AERATION DETAIL C

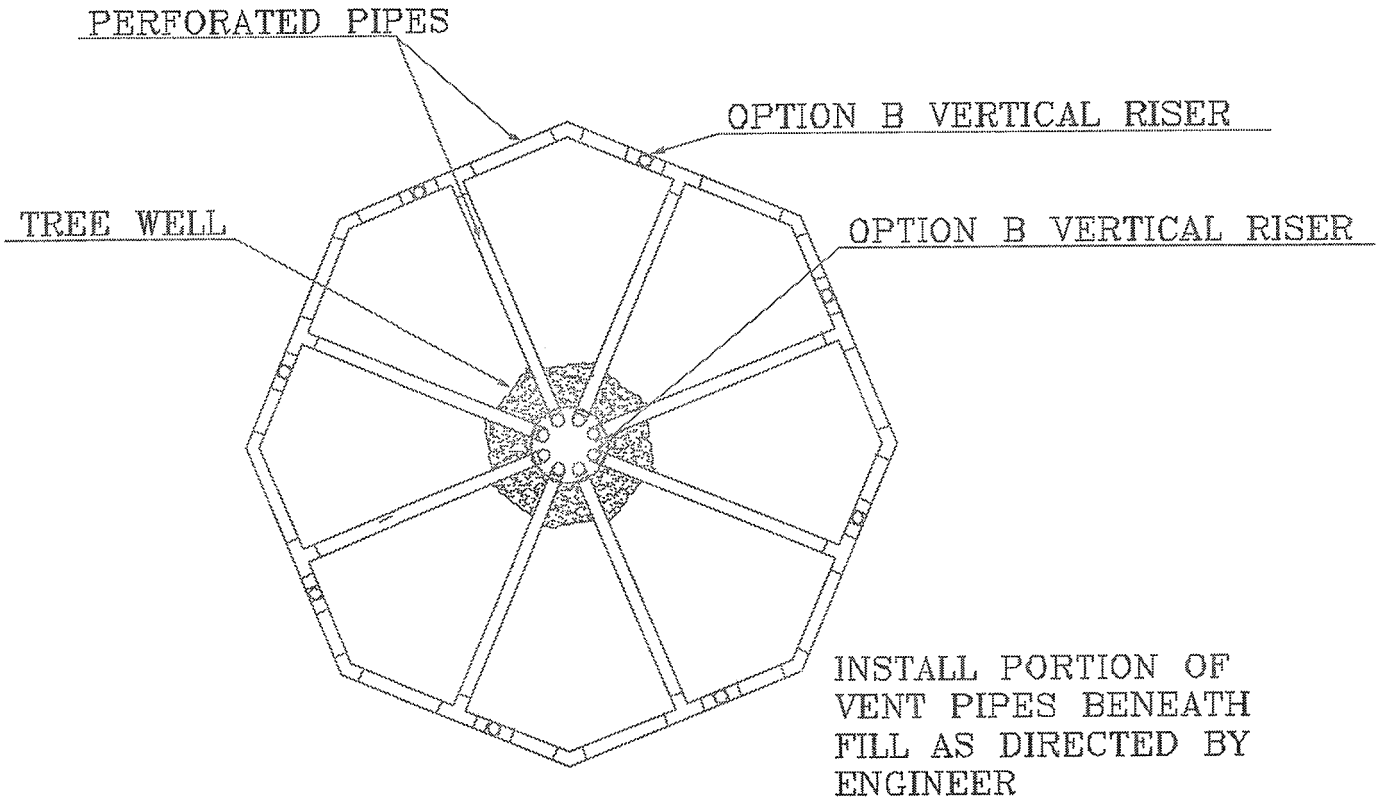
N. T. S.

NOTE: THIS AERATION SYSTEM CAN BE USED FOR NEW PROJECTS WHERE FILL IS OCCURRING SUCH AS PARKING LOTS OR CONSTRUCTION. DRAIN AWAY FROM EXISTING TREE.

PERMANENT TREE PROTECTION DETAIL (WHEN FINISHED GRADE IS 1'-0" OR MORE ABOVE EXISTING GRADE)

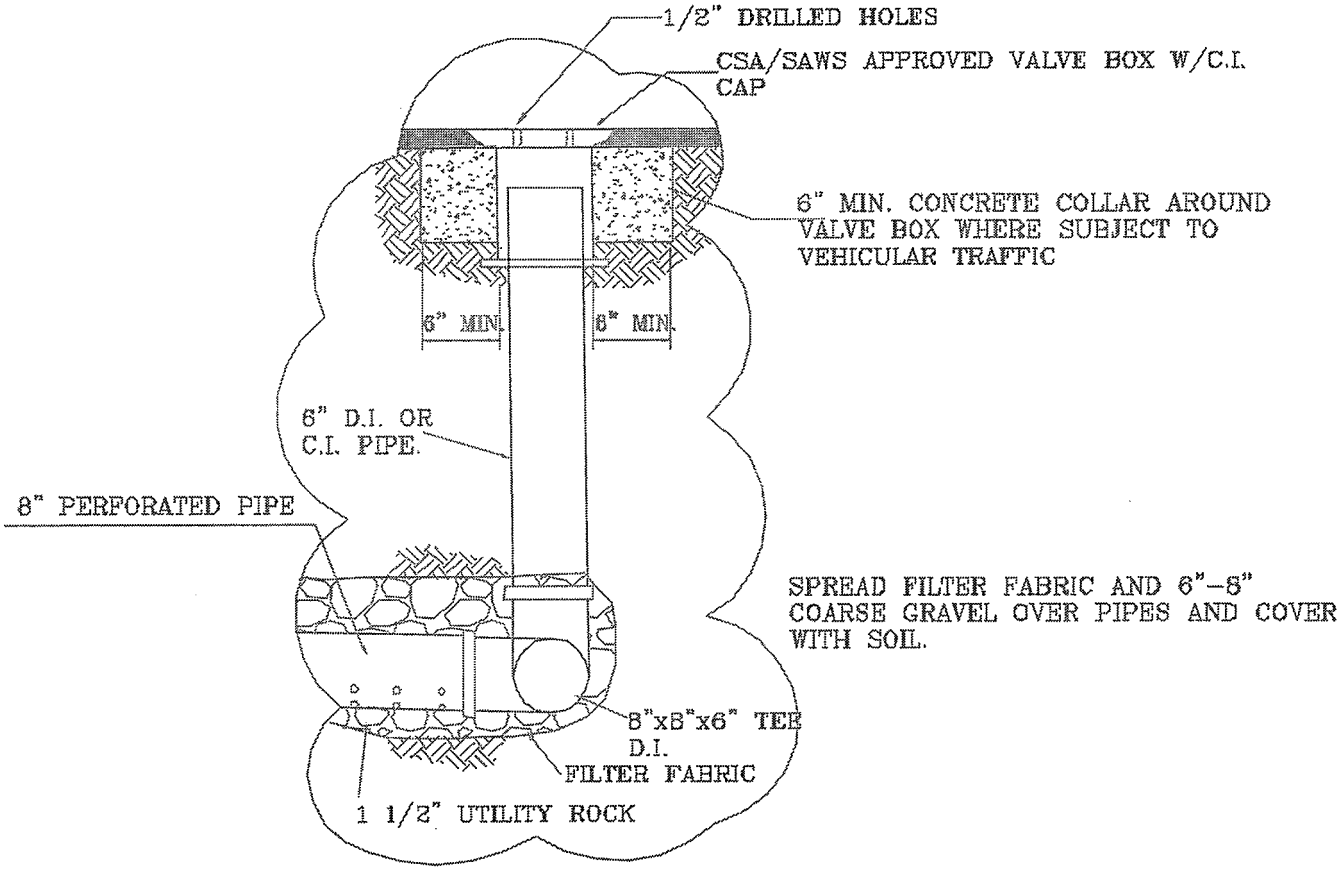
NOTE:

WELL TO BE CONSTRUCTED OF STONE, BLOCK OR BRICK. IF BRICK IS USED, VERTICAL JOINTS LEFT OPEN FOR DRAINAGE 1/2" MAXIMUM INSIDE FACE OF WALL.



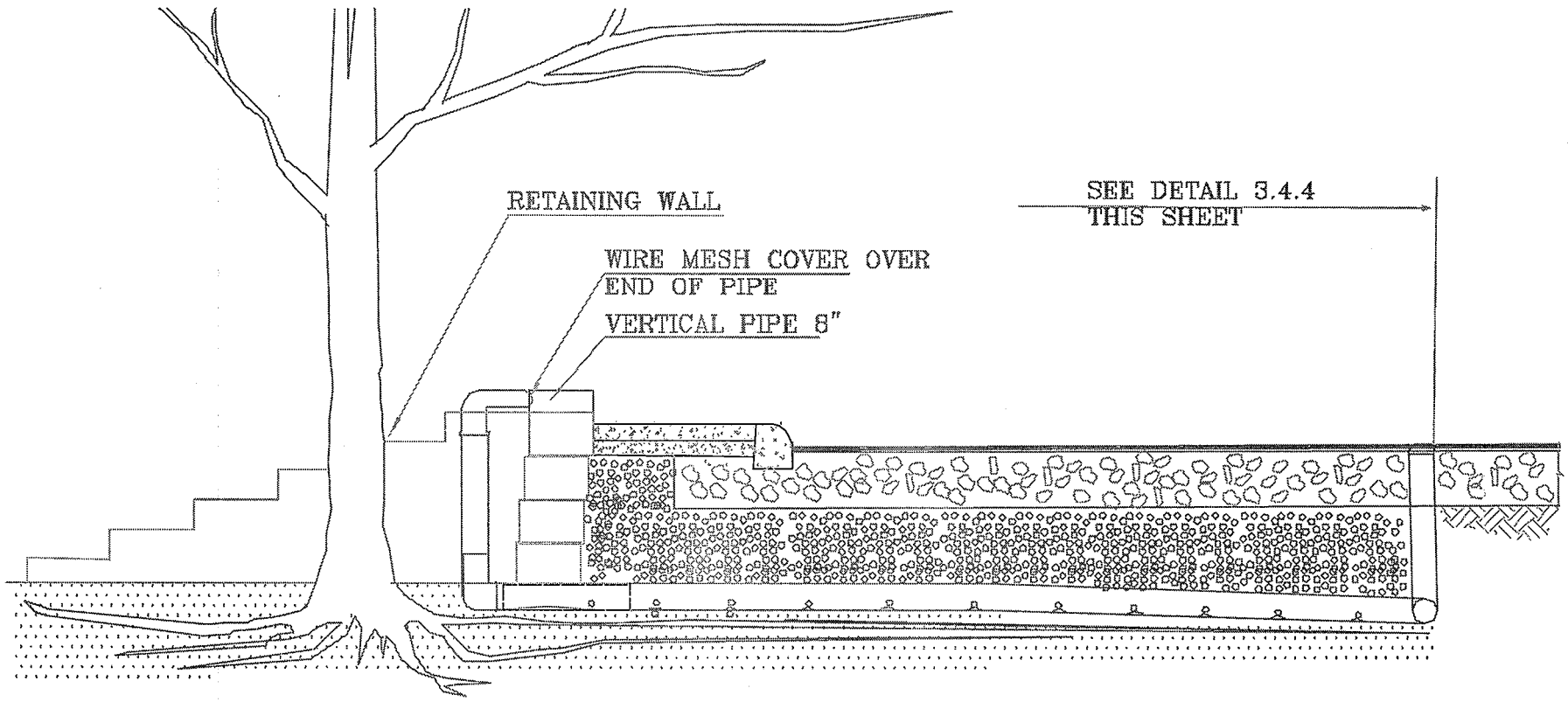
4.4.3 PLAN VIEW C

N. T. S.



4.4.4 TREE AERATION SECTION C

N. T. S.

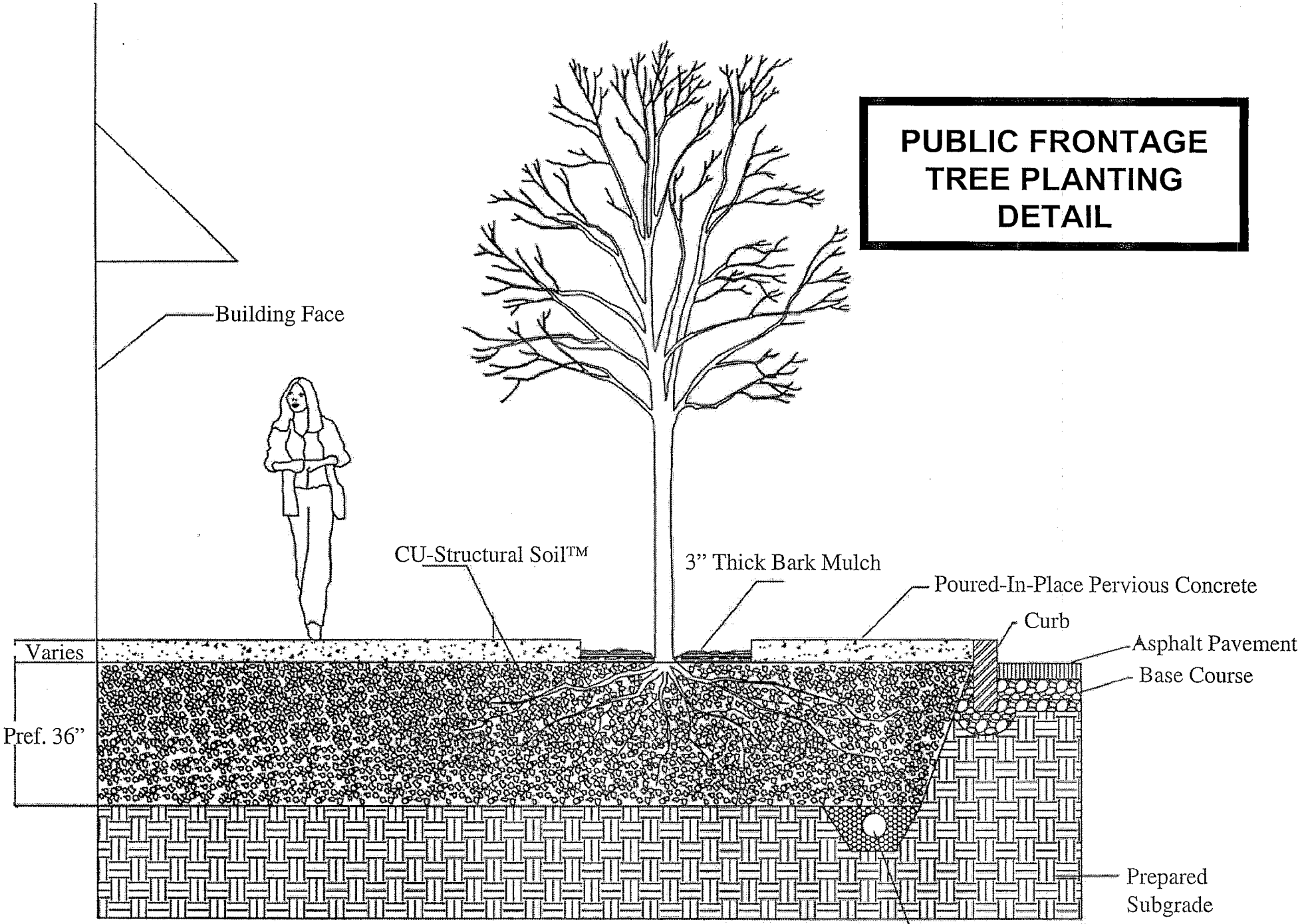


4.4.5 TREE AERATION DETAIL D

N. T. S.

NOTE: THIS AERATION SYSTEM CAN BE USED FOR NEW PROJECTS WHERE FILL IS OCCURRING SUCH AS PARKING LOTS OR ROADWAY CONSTRUCTION. DRAIN AWAY FROM EXISTING TREE.

PUBLIC FRONTAGE TREE PLANTING DETAIL



Source: http://www.hort.cornell.edu/uhi/outreach/pdfs/custructuralsoilwebpdf.pdf (Bassuck et al.)